

C.2 CARLSBAD AREA OFFICE SUMMARY

NOTE: This site summary provides information and data for sites under the Department's Carlsbad Area Office. The data for this summary were collected in 1999 and do not necessarily reflect funding or completion profiles for the site. The data do not include changes that resulted from actual FY 2000 appropriations or anticipated changes as a result of both FY 2000 supplemental and FY 2001 budget requests. The Department is in the process of updating its life-cycle information for the EM program.

The 1999 data were the basis for DOE's *Status Report on Paths to Closure* (March 2000). The costs in the "Cost and Completion Date" section of this summary are the sum of the project planning baselines prepared by the field office and generally do not include estimates of project uncertainty. On the other hand, the cost range in the national status report includes an estimate of the cost resulting from project uncertainties, and EM's overall estimate of life-cycle costs of \$151-195 billion from FY 2000 to FY 2070 (or \$168-\$215 billion if the costs incurred between FY 1997 and FY 2000 are included in the cost range estimate).

The mission of the Carlsbad Area Office (CAO) is to protect human health and the environment by operating the Waste Isolation Pilot Plant (WIPP). WIPP serves two purposes: the safe disposal of transuranic (TRU) waste and the establishment of an effective system for the management of TRU waste from generation to disposal. It includes personnel assigned to CAO, WIPP site operations, transportation, and other activities associated with the National TRU Program. The CAO develops and directs implementation of the TRU waste program, and assesses compliance with the program guidance, and the commonality of activities and assumptions among all TRU waste sites.

As a cornerstone of the Department of Energy's (DOE) national cleanup strategy, WIPP is designed to permanently dispose of TRU waste generated by defense-related

activities. Located 26 miles east of Carlsbad in southeastern New Mexico, WIPP project facilities include disposal rooms excavated 2,150 feet underground (about a half-mile) in an ancient, stable salt formation. TRU waste consists primarily of tools, gloves, clothing, and other such items contaminated with trace amounts of radioactive elements, mostly plutonium. On May 13, 1998, the Secretary of Energy made the decision that WIPP was ready to begin disposal operations and provided Congress with the required notification. Due to pending litigation and issues raised concerning the characterization of the Los Alamos National Laboratory (LANL) waste, the initial shipping date was delayed. On March 22, 1999, the court ruled that WIPP had interim status under the Resource Conservation and Recovery Act and that there was no

injunction preventing shipments of waste. WIPP began disposal operations of defense-generated TRU waste on March 26, 1999 with an initial waste shipment from LANL. A major milestone was met when the Idaho National Engineering and Environmental Laboratory (INEEL) initiated waste shipments to WIPP on April 27, 1999, thereby meeting a DOE commitment to ship waste by April 30, 1999. The first TRU waste shipment from the Rocky Flats Environmental Technology Site (RFETS) to WIPP occurred on June 16, 1999.

On October 27, 1999, the State of New Mexico issued a final order granting a Hazardous Waste Permit to DOE that became effective on November 26, 1999. DOE temporarily halted waste shipments to WIPP to focus on implementing requirements of the permit.

C.2.1 End State

WIPP is neither a "cleanup" nor a "closure" site. It is the only TRU waste disposal site in the world. TRU waste management activities for both contact-handled and remote-handled wastes are projected to be completed by FY 2039. The disposal phase is scheduled to be completed in FY 2034, which allows five years for the decommissioning of the surface facilities and permanently closing the underground. In accordance with the Land Withdrawal Amendment Act of 1996, DOE will have disposed of up to 175,600 cubic meters of TRU waste in WIPP. Starting in FY 2039, a reduced federal staff and technical contractor support will maintain records of WIPP and the active institutional controls associated with land withdrawal. Monuments and markers will be built at the site to warn people of the presence of radioactive waste. Active institutional controls over the site will be maintained for 100 years. Low risk has been assigned to this project based upon performance assessments included in the facility's permit, which requires no migration of hazardous or radioactive material for 10,000 years. Following completion of the project, there will be no access to the underground. The surface area will be unrestricted for recreational and agricultural uses with the exception of 124 acres, which constitute the exclusive-use passive institutional control area.

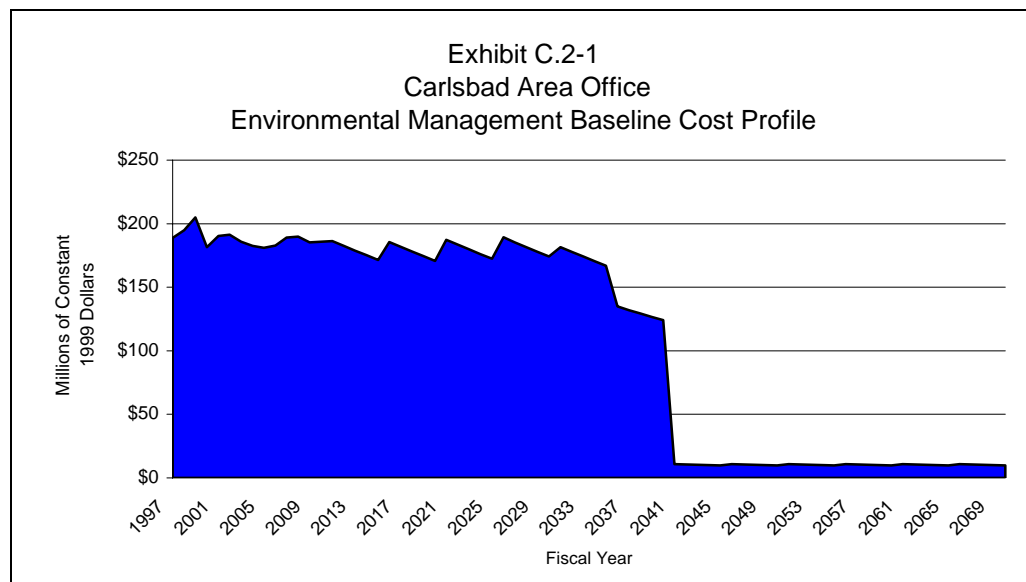
C.2.2 Cost and Completion Dates

The Carlsbad Area Office has divided its Environmental Management (EM) work into five discrete projects. A Project Baseline Summary (PBS) exists for each project and contains detailed programmatic information, including cost, schedule, scope, end state,

and interim milestones. For additional information on these projects, refer to the individual PBSs.

The sum of the costs of the planning baselines for individual projects managed by the Carlsbad Area Office's TRU waste management and disposal activities is \$8.1 billion (constant FY 1999 dollars) through FY 2070. The overall planned completion date for disposal operations at WIPP is 2034, with dismantling and decommissioning taking another five years and active institutional controls continuing thereafter for 100 years. With WIPP opening one year later than expected, the completion date was extended by one year to FY 2039.

The projected cost profile for EM associated with the Carlsbad Area Office was developed by combining the cost estimates in each of the PBSs. Exhibit C.2-1 displays the resultant baseline cost profile.



C.2.3 Accomplishments Since the 1998 *Paths to Closure* Report

The Carlsbad Area Office achieved a significant milestone since the 1998 *Paths to Closure* report. In May of 1998, Secretary of Energy Peña declared WIPP open for the disposal of TRU wastes. Shipments and final dispositioning began on March 26, 1999. During FY 1999, the WIPP facility received 32 shipments of TRU waste (17 from LANL, 12 from RFETS, and 3 from INEEL) enabling work to continue on schedule at other sites.

C.2.4 Work Scope Summary

The EM mission at the Carlsbad Are Office consists of work scope involving TRU waste receipt and disposal operations, re-certification of the facility, development of a transportation system, and implementing the TRU waste program. More information about work scope can be found at the following websites, which contain links to the conceptual summary disposition maps (<http://emi-web.inel.gov/summary.html>) and the detailed disposition maps (<http://emiweb.inel.gov/dmaps.html>) in PDF format.